

Re: High Linolenic Linseed Flax

The cross 97-27018-3/97-24021-4 from which M5791 was derived also produced many other lines with 73% linolenic content. Two of these sister lines of 97-7981-3 and 97-7741-4 were crossed with an accession, U5-5. Selection for high linolenic content was carried out using a breeding procedure identical to that described in the development of M5791

- Analysis of seed of F2 plants derived from the crosses.
- ½ seed analysis of seed of selected high linolenic F2 plants.
- Selection for high linolenic content in subsequent segregating generations.

Analysis Results of F2 Plants for linolenic acid content:

1. Cross 97-7981-3/U5-5
 - i. Analysis of 120 F2 plants.
 - Range – 66.6% – 73.5%
 - Number of F2 plants over 70% - 74/120 (62%)
 - ii. ½ seed analysis of F2 plant 160-53 (73.5%)
 - Range – 69.1 – 77.3 %
 - Number of seeds over 70% - 99/100 (99%)
2. Cross 97-7741-4/U5-5
 - i. Analysis of 119 F2 plants.
 - Range – 66.6% – 75.0%
 - Number of F2 plants over 70% - 48/119 (40%)
 - ii. ½ seed analysis of F2 plant 157-43 (75%)
 - Range – 69.0 – 78.4
 - Number of seeds over 70% - 98/100 (98%)

Selection for high linolenic content in subsequent segregating populations derived from selected F2 plants resulted in the identification of brown and yellow seeded lines with 2.0 percentage points higher linolenic content than that of M5791. Agronomic suitable brown seeded lines developed from cross 97-7981-3/U5.5 are:

M6549	M6561
M6550	M7059
M6552	M7061
M6553	M7062
M6554	M7069
M6555	

Agronomic suitable yellow seeded lines developed from cross 97-7741-4/U5-5 include M6666, M7073, M7076 and M7077

Lines M6552 and M7073 will be commercialized once patent for high linolenic flax is granted.

Q Cross 97-7981-3 / U5-5
Single F2 Plants

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F2-25s7.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2 Single Plant		DATE:		Oct. 20	1998	
CONDITIONS:		160 25 seed 97-7981-3 / U5-5						
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
1	160-1		208.7	3.7	2.3	16.5	9.3	68.2
2	160-2		214.7	3.6	2.2	13.1	9.8	71.3
3	160-3		207.7	3.4	2.5	17.6	8.4	68.0
4	FP 1001 (25 seed)		198.3	5.0	3.4	16.6	13.7	61.3
5	160-4		213.8	3.5	2.5	13.8	9.0	71.3
6	160-5		214.2	3.5	2.3	12.8	11.1	70.3
7	160-6		213.9	3.4	2.5	14.0	8.8	71.3
8	160-7		211.8	3.3	2.6	14.8	9.4	69.9
9	160-8		214.7	3.7	2.2	13.9	8.0	72.2
10	160-9		214.1	3.5	2.7	13.5	8.7	71.6
11	160-10		214.3	3.5	2.5	12.2	11.4	70.3
12	160-11		216.5	3.2	2.4	12.7	9.0	72.6
13	160-12		210.6	3.6	2.5	15.2	9.3	69.3
14	160-13		210.1	3.4	2.6	15.3	10.3	68.5
15	160-14		209.2	3.6	2.5	16.3	8.8	68.8
16	160-15		214.8	3.7	2.2	13.3	9.2	71.7
17	160-16		211.5	4.0	2.5	13.6	10.4	69.5
18	160-17		213.2	3.5	2.3	14.3	9.2	70.7
19	160-18		213.3	3.4	2.6	13.5	10.2	70.4
20	160-19		213.5	3.4	2.4	13.3	10.6	70.2
21	160-20		214.4	3.9	2.4	12.0	10.9	70.8
22	160-21		210.3	3.7	2.5	15.6	8.7	69.5
23	160-22		210.7	3.6	2.5	14.3	11.1	68.5
24	FP 1001 (Bulk)		196.7	5.3	3.3	16.9	14.2	60.2
25	160-23		211.9	3.5	2.3	14.1	11.0	69.1
26	160-24		209.4	3.8	2.5	14.8	11.0	67.9
27	160-25		213.7	3.7	2.2	13.3	10.3	70.5
28	160-26		215.6	3.3	2.3	12.9	9.5	71.9
29	160-27		213.1	3.7	2.2	13.4	10.7	70.0
30	160-28		215.6	3.6	2.0	12.4	10.7	71.2
31	160-29		216.2	3.8	2.3	11.4	10.7	71.8
32	160-30		217.0	3.7	2.2	12.0	9.2	72.9
33	FP 1001 Bulk		196.6	5.3	3.3	16.9	14.2	60.2
34	160-31		213.3	3.4	2.5	14.0	9.5	70.7
35	160-32		215.3	3.7	2.2	13.0	9.2	72.0
36	160-33		211.7	3.4	2.8	14.1	10.3	69.4
37	160-34		214.4	3.4	2.4	13.8	8.8	71.6
38	160-35		212.2	3.8	2.3	13.2	11.5	69.2
39	160-36		211.8	3.7	2.5	14.4	9.5	70.0
40	160-37		214.8	3.4	2.5	13.3	9.1	71.7
41	160-38		206.5	3.7	2.8	16.5	10.2	66.7

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AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F2-25s7.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2 Single Plant		DATE:	Oct. 20	1998		
CONDITIONS:		160 25 seed						
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
42	160-39		211.1	3.6	2.7	14.1	10.5	69.1
43	160-40		212.7	3.4	2.4	14.7	8.9	70.6
44	160-41		212.0	3.8	2.7	13.2	10.7	69.7
45	160-42		211.4	3.4	2.3	15.0	10.0	69.2
46	160-43		210.1	3.7	2.9	14.0	10.9	68.5
47	160-44		213.8	3.8	2.4	13.4	9.3	71.1
48	160-45		213.5	3.4	2.5	13.4	10.3	70.4
49	160-46		212.6	3.7	2.3	14.3	9.3	70.4
50	160-47		213.7	3.4	2.4	14.2	8.7	71.3
51	160-48		214.7	3.4	2.4	13.6	8.9	71.7
52	FP 1001 (25 seed)		198.5	5.1	3.4	16.5	13.6	61.4
53	160-49		216.4	3.6	2.5	11.5	10.1	72.3
54	160-50		215.6	3.6	2.6	12.5	9.2	72.2
55	160-51		212.0	3.3	2.4	15.2	9.0	70.1
56	160-52		213.4	3.2	2.5	14.4	9.1	70.8
57	160-53		217.8	3.3	2.2	12.2	8.7	73.5
58	160-54		213.3	3.4	2.4	14.6	8.5	71.1
59	160-55		213.4	3.5	2.3	14.2	9.2	70.8
60	160-56		212.2	3.6	2.3	14.6	9.5	70.0
61	160-57		216.3	3.7	2.2	11.5	10.9	71.7
62	160-58		213.6	3.6	2.4	13.6	9.2	71.0
63	160-59		208.4	3.5	2.4	16.2	10.4	67.5
64	160-60		215.4	3.4	2.3	13.2	9.2	72.0

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70.44

160 - 10.5

68.7 - 73.5

Cross 97-7981-3/45-5
Single F2 Plants

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F2-25s7B.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2 Single Plant			DATE: Nov. 2		1998	
CONDITIONS:		160 25 seed 97-7981-3 / 45-5						
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
1	FP 1001 Bulk 10/27		196.3	5.4	3.4	16.9	14.0	60.2
2	160-61		212.0	3.6	2.6	14.2	9.5	70.1
3	160-62		212.6	3.8	2.7	13.5	9.5	70.5
4	160-63		209.7	3.6	2.5	15.3	10.3	68.3
5	160-64		213.9	3.7	2.3	13.6	9.1	71.3
6	160-65		210.4	3.6	2.6	14.1	11.5	68.2
7	160-66		210.5	3.5	3.0	14.6	9.6	69.3
8	160-67		209.8	3.6	2.6	15.5	9.6	68.8
9	160-68		211.5	3.4	2.7	14.2	10.1	69.5
10	160-69		210.9	3.6	2.5	14.6	10.4	68.9
11	160-70		211.5	3.4	2.7	14.9	8.9	70.0
12	160-71		211.2	3.5	2.7	14.3	10.4	69.2
13	160-72		210.9	3.8	2.5	14.0	10.8	68.9
14	160-73		213.2	3.7	2.5	12.8	10.7	70.2
15	160-74		212.1	3.5	2.5	14.3	9.7	70.0
16	160-75		213.6	3.4	2.4	14.0	9.7	70.6
17	160-76		214.1	3.5	2.5	13.3	9.5	71.2
18	160-77		208.1	3.3	2.7	16.9	8.9	68.1
19	160-78		211.6	3.4	2.3	15.3	9.5	69.5
20	FP 1001 25 s 10/27		200.8	4.8	3.5	15.4	13.6	62.7
21	160-79		213.6	3.5	2.4	13.3	10.6	70.2
22	160-80		212.3	3.8	2.4	14.1	9.4	70.3
23	160-81		214.5	3.7	2.4	13.0	9.3	71.6
24	160-82		213.9	3.6	2.5	13.5	9.1	71.3
25	160-83		212.8	3.4	2.7	14.0	9.0	70.8
26	160-84		214.2	3.4	2.5	13.8	8.7	71.6
27	160-85		213.5	3.4	2.3	13.9	9.8	70.5
28	160-86		212.6	3.4	2.1	14.8	9.8	69.9
29	160-87		211.5	3.5	2.6	15.0	9.0	70.0
30	160-88		213.0	3.5	2.2	14.3	9.7	70.3
31	160-89		211.2	3.4	2.8	15.0	8.9	69.9
32	160-90		212.1	3.3	2.5	14.9	9.3	70.0
33	160-91		211.5	3.7	2.5	14.4	9.8	69.6
34	160-92		213.9	3.7	2.6	12.7	10.1	70.9
35	160-93		214.8	3.5	2.7	12.3	10.0	71.4
36	160-94		210.1	3.6	2.5	15.0	10.2	68.6
37	160-95		213.3	3.3	2.6	13.1	11.1	69.9
38	160-96		215.3	3.4	2.4	13.2	9.0	72.0
39	160-97		212.1	3.1	2.6	14.8	9.6	69.9
40	FP 1001 Bulk 10/27		196.6	5.3	3.4	16.9	14.1	60.3
41	160-98		214.4	3.1	2.8	13.5	9.2	71.4

AGRICULTURE CANADA			MORDEN RESEARCH STATION					
F2-25s7B.XLS								
			OILSEED QUALITY ANALYSIS					
SAMPLES ANALYSED:			F2 Single Plant		DATE:	Nov. 2	1998	
CONDITIONS:			160 25 seed					
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
42	160-99		213.4	3.3	2.5	14.0	9.7	70.6
43	160-100		211.3	3.5	2.5	14.8	9.7	69.5
44	160-101		208.1	3.7	2.4	15.5	11.8	66.6
45	160-102		209.3	3.6	2.5	15.3	10.7	67.9
46	160-103		212.3	3.6	2.6	14.2	9.2	70.4
47	160-104		212.3	3.4	2.4	14.5	10.0	69.8
48	160-105		210.9	3.7	2.6	14.1	11.0	68.7
49	FP 1001 Bulk 10/27		196.7	5.2	3.5	17.0	13.9	60.4
50	160-106		212.5	3.5	2.5	14.4	9.3	70.3
51	160-107		213.1	3.4	2.5	14.5	8.7	70.9
52	160-108		211.4	3.5	2.4	15.0	9.7	69.4
53	160-109		212.4	3.3	2.7	14.6	8.8	70.6
54	160-110		211.3	3.5	2.2	15.5	9.2	69.6
55	160-111		216.8	3.2	2.4	12.5	9.3	72.6
56	160-112		211.5	3.4	2.6	14.6	9.9	69.5
57	160-113		211.3	3.7	2.8	13.5	10.9	69.1
58	160-114		212.5	3.5	2.7	13.5	10.5	69.9
59	160-115		213.9	3.4	2.5	13.9	8.7	71.5
60	160-116		210.1	3.6	2.5	15.3	9.7	68.8
61	160-117		213.8	3.6	2.7	13.2	9.4	71.1
62	160-118		214.3	3.5	2.2	13.8	9.1	71.3
63	160-119		212.4	3.4	2.4	14.6	9.3	70.2
64	160-120		212.4	3.5	2.5	14.6	8.8	70.6
65	FP 1001 25 seed		200.9	4.7	3.5	15.4	13.6	62.7

70.0

CB.E - 72.6

1/2 Seed samples
160-53

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F-160A.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2 Half Seed		GT. 7981-3 / 4005-5				
CONDITIONS:		160-53	Brown	DATE:		Nov. 24	1998	
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
1	160-53-1		216.1	3.7	1.7	14.2	7.4	73.0
2	160-53-2	✓	219.5	3.6	2.0	12.1	7.1	75.2
3	160-53-3		218.9	3.4	2.3	11.4	8.8	74.1
4	160-53-4	✓	219.6	3.5	2.0	12.1	7.3	75.1
5	160-53-5	✓	220.6	3.6	2.0	11.2	7.7	75.5
6	160-53-6	✓	216.7	3.3	1.9	13.6	8.3	72.9
7	160-53-7	✓	221.1	3.1	2.1	12.2	6.2	76.4
8	160-53-8	✓	221.9	3.4	1.7	12.1	6.0	76.9
9	160-53-9		214.8	3.6	2.0	14.0	8.4	72.0
10	160-53-10		212.6	3.4	1.6	16.4	7.9	70.7
11	160-53-11		220.4	3.1	2.2	10.9	9.1	74.7
12	160-53-12		218.5	3.6	2.2	11.8	8.4	74.1
13	160-53-13		218.7	3.2	2.1	12.4	8.0	74.3
14	160-53-14	✓	221.0	3.5	2.1	10.8	7.9	75.7
15	160-53-15		218.4	3.5	2.4	12.4	6.8	74.9
16	160-53-16		218.0	3.5	2.1	13.0	7.1	74.4
17	160-53-17		217.0	3.5	2.6	11.6	9.4	72.9
18	160-53-18		217.6	3.6	2.3	12.1	8.3	73.7
19	160-53-19		219.2	3.5	2.0	11.8	8.2	74.5
20	160-53-20		216.7	3.5	2.0	13.2	8.1	73.1
21	160-53-21		218.8	3.3	2.3	12.3	7.4	74.7
22	160-53-22		217.0	3.5	2.0	13.0	8.4	73.2
23	160-53-23		217.0	3.4	1.9	13.9	7.0	73.7
24	160-53-24		216.1	3.5	2.3	13.0	8.4	72.7
25	160-53-25	✓	219.4	3.7	2.0	11.6	7.7	75.0
26	160-53-26		217.2	3.4	2.0	12.9	8.7	73.0
27	160-53-27		214.1	3.7	1.9	15.0	7.5	72.0
28	160-53-28		216.2	3.7	2.7	11.9	8.7	73.0
29	160-53-29		208.4	3.7	2.2	18.0	7.0	69.1
30	160-53-30		217.6	3.1	1.8	13.8	7.8	73.4
31	160-53-31	✓	220.1	3.3	2.3	11.3	7.7	75.3
32	160-53-32		216.1	3.4	2.5	13.9	6.3	73.9
33	160-53-33		217.9	3.6	2.5	11.8	8.1	74.0
34	160-53-34	✓	219.8	3.4	2.1	12.2	7.0	75.4
35	160-53-35	✓	218.7	3.6	2.5	11.9	6.7	75.3
36	160-53-36		216.9	3.4	2.3	12.8	8.1	73.3
37	160-53-37		218.8	3.3	2.2	11.7	8.7	74.0
38	160-53-38	✓	222.8	3.3	2.0	11.1	6.4	77.3
39	160-53-39	✓	221.3	3.6	2.0	11.1	7.1	76.3
40	160-53-40		217.5	3.6	2.2	12.4	8.0	73.8
41	160-53-41		218.1	3.6	2.0	12.6	7.7	74.1

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F-160A.XLS		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2 Half Seed			DATE:		Nov. 24	1998
CONDITIONS:		160-53	Brown					
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
42	160-53-42		215.4	3.4	1.8	15.4	6.2	73.2
43	160-53-43		216.0	3.5	2.2	13.8	7.4	73.1
44	160-53-44	✓	219.4	3.5	1.9	12.4	7.1	75.1
45	160-53-45		214.1	4.0	2.6	13.8	6.7	72.9
46	160-53-46		215.0	3.5	2.3	13.9	8.1	72.3
47	160-53-47		217.7	3.6	2.3	12.9	6.6	74.6
48	160-53-48		219.3	3.5	1.7	12.3	8.0	74.5
49	160-53-49		218.9	3.6	2.0	11.8	8.0	74.5
50	160-53-50		216.3	3.5	2.3	13.2	7.9	73.1

7.7 74.0

3.3 2.2 12.6 1.7 13.5

70 - 1
71 - 3
72 - 7
73 - 10
74 - 10
75 - 9
76 - 1

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F-160B.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2			DATE:	Jan. 13	1999	
CONDITIONS:		Half seed	160-53	Brown				
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
1	160-53-51		216.1	3.8	2.4	12.3	8.6	72.9
2	160-53-52		216.9	3.5	2.6	12.1	8.3	73.4
3	160-53-53		213.8	3.3	2.0	15.7	7.2	71.8
4	160-53-54		217.5	3.4	2.0	13.1	7.7	73.8
5	160-53-55		218.6	3.4	2.3	12.1	7.7	74.5
6	160-53-56		218.9	3.3	2.1	11.6	9.2	73.8
7	160-53-57		218.2	3.4	1.8	12.7	8.5	73.6
8	160-53-58		214.3	3.5	2.0	14.4	8.7	71.5
9	160-53-59		215.9	3.4	2.2	13.8	7.7	72.9
10	160-53-60		216.9	3.3	2.0	14.4	6.2	74.1
11	160-53-61		218.2	3.4	2.5	11.8	8.2	74.1
12	160-53-62		212.8	3.2	2.3	15.6	7.9	71.0
13	160-53-63		218.2	3.5	2.2	12.5	7.3	74.4
14	160-53-64		218.9	3.5	2.3	12.2	6.8	75.1
15	160-53-65		213.1	3.3	2.3	14.9	8.8	70.7
16	160-53-66		218.8	3.2	1.8	12.5	8.7	73.8
17	160-53-67		216.2	3.3	2.0	14.2	7.4	73.1
18	160-53-68		216.4	3.3	2.2	13.6	8.0	72.9
19	160-53-69		213.4	3.2	1.8	16.5	6.8	71.6
20	160-53-70		217.2	3.2	1.9	13.6	8.1	73.2
21	160-53-71		216.5	3.3	2.3	13.1	8.5	72.8
22	160-53-72		215.7	3.2	2.1	15.1	6.1	73.4
23	160-53-73		216.8	3.5	2.1	13.5	7.3	73.6
24	160-53-74		217.0	3.1	2.0	14.4	6.7	73.8
25	160-53-75		215.7	3.3	2.1	14.0	7.8	72.7
26	160-53-76		212.3	3.3	2.1	16.0	7.8	70.7
27	160-53-77		219.4	3.2	2.2	12.0	8.0	74.7
28	160-53-78		221.2	3.5	1.7	11.0	8.3	75.5
29	160-53-79		219.6	3.3	2.2	11.4	8.8	74.4
30	160-53-80		217.1	3.3	2.7	12.8	7.1	74.1
31	160-53-81		215.3	3.3	1.7	15.6	6.6	72.8
32	160-53-82	4.9	218.8	3.2	1.7	13.0	8.3	73.9
33	160-53-83		218.1	3.3	2.1	12.6	8.1	73.8
34	160-53-84		216.2	3.1	2.2	13.9	8.4	72.5
35	160-53-85		219.1	3.2	2.5	11.7	7.9	74.7
36	160-53-86		215.1	3.3	2.1	14.2	8.6	71.8
37	160-53-87		217.9	3.3	2.2	12.4	8.7	73.5
38	160-53-88		213.4	3.2	1.8	16.1	7.8	71.1
39	160-53-89		211.7	3.5	2.5	16.3	6.6	71.2
40	160-53-90		216.1	3.4	2.2	13.9	7.2	73.3
41	160-53-91		214.5	3.2	1.8	15.1	8.5	71.4

AGRICULTURE CANADA			MORDEN RESEARCH STATION					
F-160B.XLS								
			OILSEED QUALITY ANALYSIS					
SAMPLES ANALYSED:		F2			DATE:	Jan. 13	1999	
CONDITIONS:		Half seed	160-53	Brown				
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
42	160-53-92		217.8	3.4	2.3	12.0	8.8	73.5
43	160-53-93		213.4	3.4	2.5	14.0	9.1	70.9
44	160-53-94		216.2	3.2	2.1	13.9	8.0	72.8
45	FP 1001 Half 01/13		176.6	5.3	3.2	29.6	12.2	49.7
46	160-53-95		212.9	3.3	1.9	16.4	7.1	71.3
47	160-53-96		216.5	3.3	2.2	13.4	8.2	72.9
48	160-53-97		215.4	3.4	2.0	14.7	7.2	72.7
49	160-53-98		217.3	3.4	2.7	11.7	9.0	73.3
50	160-53-99	4-8	214.5	3.3	1.5	15.8	7.8	71.6
51	160-53-100		216.2	3.2	1.8	14.4	7.7	72.8

Box 97-7741-4/105-5

Plant-157-43

1/2 Seed Analyses

AGRICULTURE CANADA			MORDEN RESEARCH STATION					
F-157A.XLS								
			OILSEED QUALITY ANALYSIS					
SAMPLES ANALYSED:			F2 Half Seed		97-7741-4/105-5			
CONDITIONS:			157-43	Yellow	75.0	DATE:	Nov. 24	1998
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
1	157-43-1		216.0	3.5	2.4	13.4	7.7	73.1
2	157-43-2		218.4	3.4	2.2	11.7	8.9	73.8
3	157-43-3		218.4	3.3	1.6	13.3	7.9	73.8
4	157-43-4	X	220.1	3.3	1.9	12.7	6.3	75.8
5	157-43-5	✓	218.2	3.7	1.5	14.1	6.0	74.8
6	157-43-6	✓	222.1	3.2	2.1	10.8	7.4	76.4
7	157-43-7	X	223.1	3.3	2.0	10.5	7.2	77.1
8	157-43-8	✓	220.3	3.4	2.0	11.9	7.2	75.5
9	157-43-9		216.2	3.7	2.6	11.8	9.6	72.4
10	157-43-10	✓	220.8	3.7	2.0	10.6	8.2	75.5
11	157-43-11		215.9	3.6	2.3	13.4	7.6	73.1
12	157-43-12	✓	220.9	3.3	1.5	12.5	7.1	75.6
13	157-43-13	✓	221.6	3.5	1.8	11.5	6.7	76.5
14	157-43-14		207.5	3.7	3.4	16.6	7.3	69.0
15	157-43-15		218.0	3.4	1.7	13.6	7.3	74.0
16	157-43-16	✓	221.4	3.4	1.9	11.0	7.9	75.8
17	157-43-17	✓	221.8	3.2	2.7	10.4	6.8	76.9
18	157-43-18	✓	218.4	3.1	1.8	13.8	6.9	74.4
19	157-43-19	✓	220.7	3.4	1.8	11.6	7.7	75.4
20	157-43-20	X	221.9	3.6	1.9	10.4	8.1	76.0
21	157-43-21	✓	220.5	3.2	2.1	11.5	8.0	75.2
22	157-43-22		218.7	3.2	2.0	12.5	8.2	74.0
23	157-43-23	X	217.9	3.5	1.4	14.6	5.8	74.7
24	157-43-24		218.4	3.5	1.6	13.1	7.8	74.0
25	157-43-25	✓	220.6	3.3	1.5	12.3	7.7	75.2
26	157-43-26	✓	222.4	3.2	2.1	10.6	7.6	76.5
27	157-43-27	✓	221.3	3.2	2.1	11.2	7.6	75.8
28	157-43-28		219.9	3.7	2.3	10.3	8.9	74.8
29	157-43-29		219.0	3.1	1.8	12.9	8.0	74.2
30	157-43-30	X	219.6	3.5	1.8	12.3	7.4	75.0
31	157-43-31	✓	223.5	3.3	2.0	10.4	6.8	77.5
32	157-43-32		216.6	3.6	2.0	13.7	7.1	73.6
33	157-43-33		218.1	3.3	1.6	13.6	7.6	73.8
34	157-43-34	✓	220.1	3.3	2.4	11.4	7.2	75.6
35	157-43-35	✓	223.8	3.3	2.3	9.7	6.9	77.8
36	157-43-36		218.4	3.4	1.6	13.0	8.4	73.7
37	157-43-37	✓	221.9	3.4	2.0	10.6	8.1	75.9
38	157-43-38		218.0	3.2	1.9	13.3	7.5	74.0
39	157-43-39	✓	222.4	3.2	1.6	11.4	7.6	76.2
40	157-43-40	X	221.7	3.5	2.3	10.2	7.8	76.2
41	157-43-41		218.3	3.7	1.8	12.8	7.3	74.4

AGRICULTURE CANADA			MORDEN RESEARCH STATION					
F-157A.XLS								
			OILSEED QUALITY ANALYSIS					
SAMPLES ANALYSED:			F2 Half Seed		DATE:	Nov. 24	1998	
CONDITIONS:			157-110 ¹³	Yellow				
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
42	157-43-42		218.5	3.5	2.2	11.5	9.3	73.6
43	157-43-43	✓	219.5	3.3	2.2	12.1	7.4	75.0
44	157-43-44		217.9	3.6	2.1	11.8	9.1	73.4
45	157-43-45	X	220.8	3.4	1.6	11.9	7.8	75.3
46	157-43-46	✓	221.4	3.4	1.6	11.9	6.8	76.2
47	157-43-47		218.3	3.2	2.0	12.5	8.8	73.5
48	157-43-48		221.3	3.5	2.4	10.3	7.8	76.0
49	157-43-49	✓	225.1	3.2	1.7	10.0	6.6	78.4
50	157-43-50	✓	220.6	33.2	2.3	11.0	8.2	75.3

69 - 1
 70
 71
 72 - 1
 73 - 10
 74 - 10
 75 - 15 7 28
 76 - 9
 77 - 3
 78 - 1

7.6 75.0

3.3 2.1 10.9 5.8 75.0

45
23

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F-157B.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2	75.0		DATE:	Jan. 13	1999	
CONDITIONS:		Half seed	157-43	Yellow				
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
1	157-43-51		215.3	3.1	1.9	15.1	7.5	72.4
2	157-43-52		224.3	3.3	1.7	10.5	6.5	78.0
3	157-43-53		210.8	3.2	1.9	18.3	6.0	70.6
4	157-43-54		218.7	3.6	2.1	10.8	10.1	73.4
5	157-43-55		218.6	3.5	2.1	12.6	6.9	74.8
6	157-43-56		221.6	3.4	2.2	10.2	8.3	75.9
7	157-43-57		220.1	3.6	2.2	10.7	8.5	75.0
8	157-43-58		219.6	3.5	2.0	11.8	7.9	74.8
9	157-43-59		219.6	3.5	1.5	12.4	8.0	74.5
10	157-43-60	4.7	221.7	3.0	1.7	12.6	6.2	76.5
11	157-43-61	4.7	218.6	3.2	1.5	13.6	7.5	74.1
12	157-43-62		220.8	3.3	2.1	11.6	7.2	75.9
13	157-43-63		224.1	3.2	1.9	10.1	7.3	77.5
14	FP 1001 Half 01/13		183.0	5.0	3.2	26.7	11.9	53.3
15	157-43-64		221.1	3.1	2.3	11.2	7.7	75.7
16	157-43-65	4.8	219.0	3.0	1.8	14.0	6.5	74.8
17	157-43-66		222.3	3.3	1.7	11.0	7.9	76.1
18	157-43-67		219.6	3.2	2.4	11.1	8.7	74.5
19	157-43-68		216.4	3.3	2.4	12.9	8.7	72.7
20	157-43-69		221.3	3.4	1.6	11.9	7.1	76.0
21	157-43-70		222.5	3.4	1.6	11.2	6.9	76.8
22	FP 1001 Half 01/13		203.1	4.4	2.7	15.7	13.9	63.3
23	FP 1001 Half 01/13		203.0	4.4	2.7	15.7	14.0	63.2
24	157-43-71		222.6	3.0	2.2	10.3	8.4	76.1
25	157-43-72		224.1	3.2	2.2	9.6	7.4	77.6
26	157-43-73		221.9	3.3	2.0	10.7	8.0	76.0
27	157-43-74	4.8	223.0	3.3	1.5	11.6	6.4	77.2
28	157-43-75	4.9	222.8	3.2	1.7	11.5	6.8	76.9
29	157-43-76		221.3	3.4	2.2	10.8	7.6	76.0
30	157-43-77		219.7	3.5	2.0	12.1	6.8	75.5
31	157-43-78		220.3	3.4	2.5	11.0	7.4	75.7
32	157-43-79		222.5	3.3	1.9	10.5	7.9	76.4
33	157-43-80		222.4	3.3	2.3	10.2	7.6	76.7
34	157-43-81		219.9	3.5	2.3	10.8	8.7	74.8
35	157-43-82		216.3	3.7	2.6	12.8	7.5	73.5
36	157-43-83		223.5	3.5	2.2	9.6	7.2	77.5
37	157-43-84		220.9	3.3	2.2	10.5	8.0	75.7
38	157-43-85		216.8	3.4	2.0	13.7	7.5	73.4
39	157-43-86		218.2	3.5	2.0	12.4	8.0	74.0
40	157-43-87		213.0	3.5	2.3	15.3	7.6	71.4
41	157-43-88		223.2	3.2	2.7	9.2	7.5	77.3

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F-157B.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2			DATE:	Jan. 13	1999	
CONDITIONS:		Half seed	157-43	Yellow				
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
42	FP 1001 Half 01/13		176.1	5.6	3.1	29.5	12.2	49.5
43	157-43-89		219.1	3.3	1.8	12.7	7.6	74.5
44	157-43-90		222.6	3.5	2.2	9.9	7.9	76.6
45	157-43-91		219.8	3.1	2.5	11.2	8.6	74.7
46	157-43-92		219.7	3.3	1.6	12.7	7.6	74.8
47	157-43-93		221.3	3.3	1.9	11.9	6.5	76.4
48	157-43-94		220.1	3.4	1.5	12.6	7.4	75.1
49	157-43-95		220.0	3.6	2.2	10.9	8.3	75.0
50	157-43-96		225.9	3.2	2.1	9.0	6.6	79.0
51	157-43-97		217.0	3.5	1.7	13.8	7.6	73.4
52	157-43-98		211.0	3.6	1.9	16.6	8.0	69.9
53	157-43-99		220.3	3.3	2.2	10.6	9.4	74.5
54	157-43-100		225.2	3.2	1.9	9.6	7.0	78.3
55	FP 1001 Half 01/13		182.5	5.2	3.1	26.7	11.9	53.1

AGRICULTURE CANADA			MORDEN RESEARCH STATION						
F2-25s1.XLS									
	OILSEED QUALITY ANALYSIS								
SAMPLES ANALYSED: F2 Single Plant			DATE: Oct. 14			1998			
CONDITIONS: 157 25 seed			97-7741-4 / dds-5-5						
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3	
1	FP 1001 Bulk		196.8	5.2	3.4	17.0	14.3	60.2	
2	Single plant 157-1		213.0	3.5	2.6	13.5	10.2	70.2	
3	157-2		213.2	3.6	2.9	13.1	9.3	71.1	
4	157-3		208.2	3.6	2.8	16.1	9.4	68.1	
5	157-4		209.8	3.6	2.8	15.1	9.5	69.0	
6	157-5		214.9	3.3	2.7	12.9	9.4	71.7	
7	157-6		211.1	3.5	2.5	15.1	9.2	69.7	
8	157-7		208.1	3.5	2.4	17.2	8.9	68.0	
9	157-8		212.7	3.1	2.3	15.5	8.6	70.5	
10	157-9		211.9	3.2	2.4	15.3	9.4	69.8	
11	157-10		210.4	3.5	2.2	16.0	9.2	69.1	
12	157-11		211.7	3.1	2.4	15.4	9.5	69.6	
13	157-12		210.7	3.4	2.3	15.9	9.0	69.4	
14	157-13		212.4	3.5	2.2	14.8	9.2	70.2	
15	157-14		213.6	3.6	2.4	13.9	9.0	71.1	
16	157-15		214.1	3.4	2.3	13.9	9.3	71.1	
17	157-16		212.5	3.3	2.4	14.4	9.8	70.0	
18	157-17		210.9	3.4	2.4	15.9	8.7	69.7	
19	157-18		211.8	3.4	2.3	14.9	9.8	69.5	
20	FP 1001 (25 seed)		197.9	5.2	3.4	16.5	13.7	61.2	
21	157-19		212.8	3.5	2.4	14.2	9.6	70.3	
22	157-20		213.4	3.4	2.5	13.9	9.5	70.7	
23	157-21		211.1	3.4	2.3	15.3	9.8	69.2	
24	157-22		213.8	3.3	2.4	14.2	8.8	71.2	
25	157-23		211.7	3.4	2.7	14.8	9.3	69.9	
26	157-24		206.8	3.4	2.4	17.3	10.3	66.6	
27	157-25		209.2	3.4	2.3	16.7	9.4	68.2	
28	157-26		212.8	3.5	2.3	14.6	9.1	70.5	
29	157-27		210.7	3.7	2.2	15.4	9.5	69.2	
30	157-28		211.6	3.2	2.4	15.1	9.9	69.4	
31	157-29		215.2	3.7	2.1	13.6	8.4	72.2	
32	157-30		211.2	3.6	2.8	14.7	9.1	69.9	
33	157-31		211.8	3.6	2.4	15.0	8.8	70.2	
34	157-32		206.8	4.1	2.6	16.7	9.0	67.6	
35	157-33		212.5	3.4	2.2	15.2	8.8	70.4	
36	157-34		209.5	3.7	2.2	16.2	9.3	68.6	
37	157-35		212.3	3.6	2.4	13.9	10.4	69.7	
38	157-36		213.2	3.5	2.3	14.4	9.2	70.7	
39	157-37		211.0	3.4	2.5	15.3	9.4	69.4	
40	FP 1001 Bulk		196.8	5.2	3.4	17.0	14.2	60.3	
41	157-38		212.7	3.5	2.2	14.4	9.8	70.1	
42	157-39		214.9	3.5	2.2	13.4	9.5	71.4	
43	157-40		213.0	3.3	2.3	14.2	10.1	70.1	
44	157-41		210.0	3.3	2.4	16.3	9.2	68.8	
45	157-42		211.6	3.8	2.3	14.4	9.7	69.7	
46	157-43 yellow		220.8	3.4	2.1	10.9	8.8	75.0	

66.6 - 75.0

69.8
69.9

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F2-25s1B.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2 Single Plant			DATE:		Oct/29	1998
CONDITIONS:		157 25 seed 97--7741-4 / 4665-5						
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
1	157-61		213.4	3.3	2.3	14.6	9.1	70.8
2	157-62	5.2	212.7	3.3	2.1	15.3	9.0	70.3
3	157-63		212.3	3.4	2.1	15.3	9.1	70.1
4	FP 1001 25 s 10/27		201.0	4.7	3.5	15.4	13.6	62.8
5	157-64		206.9	3.6	2.4	17.4	9.3	67.2
6	157-65		209.8	3.5	2.4	16.5	8.5	69.2
7	157-66		209.3	3.8	2.6	15.7	9.2	68.8
8	157-67		211.9	3.2	2.5	15.3	9.2	69.9
9	157-68		210.5	3.5	2.3	16.1	8.8	69.4
10	157-69		212.9	3.4	2.4	14.7	8.6	70.8
11	157-70		208.5	3.4	2.3	16.8	9.7	67.7
12	157-71		214.2	3.3	2.6	13.7	9.0	71.5
13	157-72		212.8	3.4	2.3	14.6	9.3	70.4
14	157-73		213.9	3.3	2.4	13.6	10.1	70.6
15	157-74	5.2	214.5	3.1	2.1	14.4	9.2	71.2
16	157-75		210.3	3.2	2.5	16.2	8.9	69.2
17	157-76		213.2	3.4	2.5	14.4	8.8	71.0
18	157-77		213.7	3.2	2.5	14.4	8.5	71.3
19	157-78		211.3	3.5	2.6	15.2	8.8	69.9
20	157-79		207.5	3.4	2.4	17.7	8.8	67.6
21	157-80		209.9	3.5	2.2	17.0	8.0	69.4
22	157-81		211.5	3.2	2.3	15.6	9.3	69.6
23	157-82		210.9	3.2	2.3	15.9	9.5	69.1
24	FP 1001 Bulk 10/27		196.9	5.2	3.5	16.9	14.1	60.4
25	157-83		213.0	3.2	2.4	15.0	8.5	70.9
26	157-84		213.7	3.3	2.4	14.6	8.3	71.4
27	157-85		211.1	3.2	2.5	15.8	8.7	69.8
28	157-86		214.4	3.5	2.4	13.5	9.0	71.5
29	157-87		210.9	3.3	2.3	15.8	9.2	69.3
30	157-88		211.7	3.5	2.4	15.2	8.8	70.1
31	157-89		214.4	3.5	2.3	13.4	9.5	71.2
32	157-90		213.2	3.6	2.4	14.2	9.0	70.9
33	FP 1001 Bulk 10/27		196.8	5.2	3.5	17.0	14.0	60.3
34	157-91		211.9	3.2	2.6	15.1	9.2	69.9
35	157-92		213.6	3.5	2.4	13.7	9.6	70.8
36	157-93		213.2	3.4	2.4	14.4	9.1	70.7
37	157-94		208.9	3.4	2.3	16.8	9.4	68.1
38	157-95		207.8	3.3	2.3	17.5	9.4	67.5
39	157-96		211.3	3.4	2.6	15.1	9.3	69.7
40	157-97		210.3	3.7	2.2	16.4	7.9	69.8
41	157-98		209.4	3.2	2.3	17.0	8.7	68.7

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F2-25s1B.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED:		F2 Single Plant			DATE:		Oct. 29	1998
CONDITIONS:		157 25 seed 97-7741-d / 260625						
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
42	157-99		210.8	3.5	2.5	15.3	9.3	69.4
43	157-100	5.4	213.6	3.2	2.2	15.0	8.5	71.1
44	157-101		213.2	3.4	2.4	14.4	8.8	70.9
45	157-102		211.8	3.3	2.3	15.0	10.0	69.4
46	157-103		213.8	3.2	2.4	14.5	8.8	71.1
47	157-104		212.3	3.5	2.5	14.5	9.1	70.3
48	157-105		212.4	3.4	2.6	14.5	9.2	70.3
49	157-106		210.3	3.1	2.4	16.5	8.9	69.1
50	157-107		213.1	3.4	2.4	13.8	10.1	70.3
51	157-108		210.7	3.6	2.5	15.2	9.5	69.3
52	FP 1001 25 s 10/27		200.7	4.8	3.5	15.4	13.7	62.6
53	157-109		212.5	3.5	2.3	15.2	8.2	70.8
54	157-110		210.6	3.7	2.6	15.1	8.8	69.7
55	157-111		212.2	3.3	2.5	14.9	9.1	70.2
56	157-112	5.5	215.0	3.2	2.3	14.6	7.6	72.3
57	157-113		211.2	3.3	2.4	15.2	10.0	69.1
58	157-114		215.0	3.4	2.2	13.9	8.5	72.0
59	157-115		213.4	3.5	2.3	13.8	10.0	70.4
60	157-116		210.0	3.5	2.4	15.8	9.8	68.6
61	157-117		212.1	3.3	2.3	15.0	9.5	69.9
62	157-118		208.5	3.3	2.5	16.7	9.6	67.8
63	157-119		206.4	3.4	2.6	17.7	9.4	66.9
64	157-120		211.2	3.5	2.6	14.8	9.7	69.4
	FP 1001 Bulk 10/27		196.9	5.2	3.4	16.9	14.0	60.4

69.9

66.9 - 72.3

97-7163 - M. 5791 check

AGRICULTURE CANADA		MORDEN RESEARCH STATION						
F2-25s5.XLS								
		OILSEED QUALITY ANALYSIS						
SAMPLES ANALYSED: 12 Single Plant		DATE: Oct. 16		1998				
CONDITIONS: 97-7163 25 seed								
No:	IDENTIFICATION	PLOT	IODINE	16:0	18:0	18:1	18:2	18:3
1	97-7163,1		213.2	3.5	2.7	13.9	8.9	71.0
2	97-7163,2		213.8	3.6	2.7	13.2	9.1	71.3
3	97-7163,3		214.2	3.5	2.8	12.7	9.6	71.3
4	97-7163,4		214.0	3.5	2.5	13.8	8.8	71.5
5	97-7163,5		212.6	3.4	2.5	15.0	8.0	71.0
6	97-7163,6		214.7	3.5	2.5	13.1	9.2	71.7
7	97-7163,7		213.3	3.4	2.6	13.5	9.9	70.5
8	FP 1001 Bulk		196.9	5.2	3.3	16.9	14.3	60.2
9	97-7163,8		213.3	3.5	2.5	13.8	9.5	70.7
10	97-7163,9		214.3	3.4	2.6	13.3	9.2	71.5
11	97-7163,10		214.8	3.5	2.5	13.3	8.8	71.9

3.4-3.6 2.5-2.8 12.7-15.0 8.0-9.9 70.5-71.9

70.7 - 71.9.

97-7163-5 - 8.0 kernel

8.0 - 9.9.